

I claim:

1. A snow making apparatus utilizing water and air to artificially produce snow,  
said apparatus comprising:

a metal snow gun housing having independent air and water chambers therein for  
5 supplying air and water under pressure to at least one nozzle in said housing for spraying air and  
water externally of said housing to produce snow in sub-freezing ambient atmosphere;

at least one nucleating nozzle including a nozzle housing having an air chamber  
therein, said nozzle housing disposed in said snow gun housing and having at least one air aperture  
through side walls thereof whereby said at least one air aperture registers with said air chamber for  
10 access of air under pressure, said air chamber having an external end and an internal end, a water  
aperture on said internal end with a forward end thereof axially exposed to the interior of said air  
chamber and having a rearward end thereof exposed to said snow gun housing water chamber for  
projecting a jet stream of water under pressure from said water aperture through said air chamber,  
and on through an exterior nozzle aperture on said nozzle housing at the external end of said air  
15 chamber, said exterior nozzle aperture being axially aligned with and larger in diameter than said  
water aperture whereby said water jet stream passes therethrough without engaging sides of said  
exterior aperture;

a removable filter closing off the rearward end of said water nozzle for filtering water  
supplied from said water chamber; and

20 an access plug in said snow gun housing and positioned for access to and removal of  
said filter.

2. The snow making apparatus of claim 1 including at least one primary water nozzle in said snow gun housing and positioned for spraying water from said water chamber to ambient atmosphere for interaction with spray from said exterior nozzle.

3. The snow making apparatus of claim 2 wherein said nozzle housing is a metal  
5 block including a plurality of said nucleating nozzles therein with the rearward ends of said water nozzles exiting to a common single rearward end cavity closed off by said filter.

4. The snow making apparatus of claim 3 wherein said exterior nozzles are removable.

5. The snow making apparatus of claim 3 wherein said filter is comprised of a  
10 metallic mesh having filter apertures of no more than .010 inches.

6. The snow making apparatus of claim 5 wherein said filter is threadably secured to said nozzle housing.

7. The snow making apparatus of claim 6 wherein said water aperture is approximately .010 inches in diameter and said exterior nozzle spray aperture is approximately .060  
15 inches in diameter.

8. The snow making apparatus of claim 3 including passages through said block and engaged with said water chamber for circulating water therethrough.

9. The snow making apparatus of claim 3 wherein said snow gun housing comprises the upper end of a snow making tower.

5 10. The snow making apparatus of claim 8 wherein said plug is positioned in a top end of said tower.